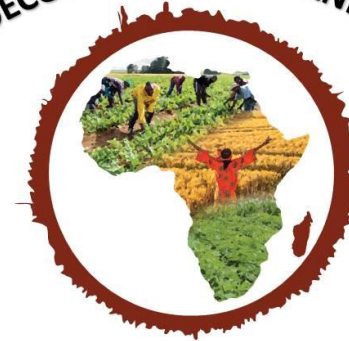


TRANSFORMING AGRICULTURE IN AFRICA  
AGROECOLOGY and ORGANIC TRADE



*Reducing Synthetic Pesticides and Fertilizers*

# Technologies/ methodologies to reduce synthetic inputs and contamination

Prof. Mwine Julius  
African Center of Agroecology and Livelihood  
Systems  
Uganda Martyrs University

# Introduction/ The Problem

- ▶ The growing belief that Production is not possible without synthetic Agro-inputs
- ▶ Africa uses minimum quantities of synthetic chemicals
- ▶ The misconception that many pesticides are not harmful
- ▶ The misuse of some synthetics in the value chain
- ▶ The slow effect on humans

# Alternative methodologies/ technologies

- ▶ 1. Creating awareness/ change on mind set



Case of example:  
Use of Diathene M45  
(Fungicide) as a post harvest  
preservative to extend shelf  
life of Tomatoes

## 2. Training/ Curriculum reviews and development

- ▶ **Knowledge is Power**
- ▶ Curriculum reviews for training institution - with help of EOAI
- ▶ Curriculum development at UMU
- ▶ Short courses/ Local and International (ITCOA)
- ▶ Diploma level - Organic
- ▶ Bachelor degree - Agroecology
- ▶ Masters - in Agroecology
- ▶ PhD - Agroecology and food systems
- ▶ **The Power of extension staff/ Game changers**

# 3. Research and publication

- ▶ To establish knowledge levels of farmers along the value chain
- ▶ To identify and verify existing technologies
- ▶ - Efficacy
- ▶ - Dosing
- ▶ - Authenticity
- ▶ To document Indigenous Knowledge that contribute to Agroecological practices



# Publication and dissemination

- ▶ - Papers in Journals - African Journal of Agroecology and Livelihood systems
- ▶ - Mass media
- ▶ - Simple tools like Cartoons

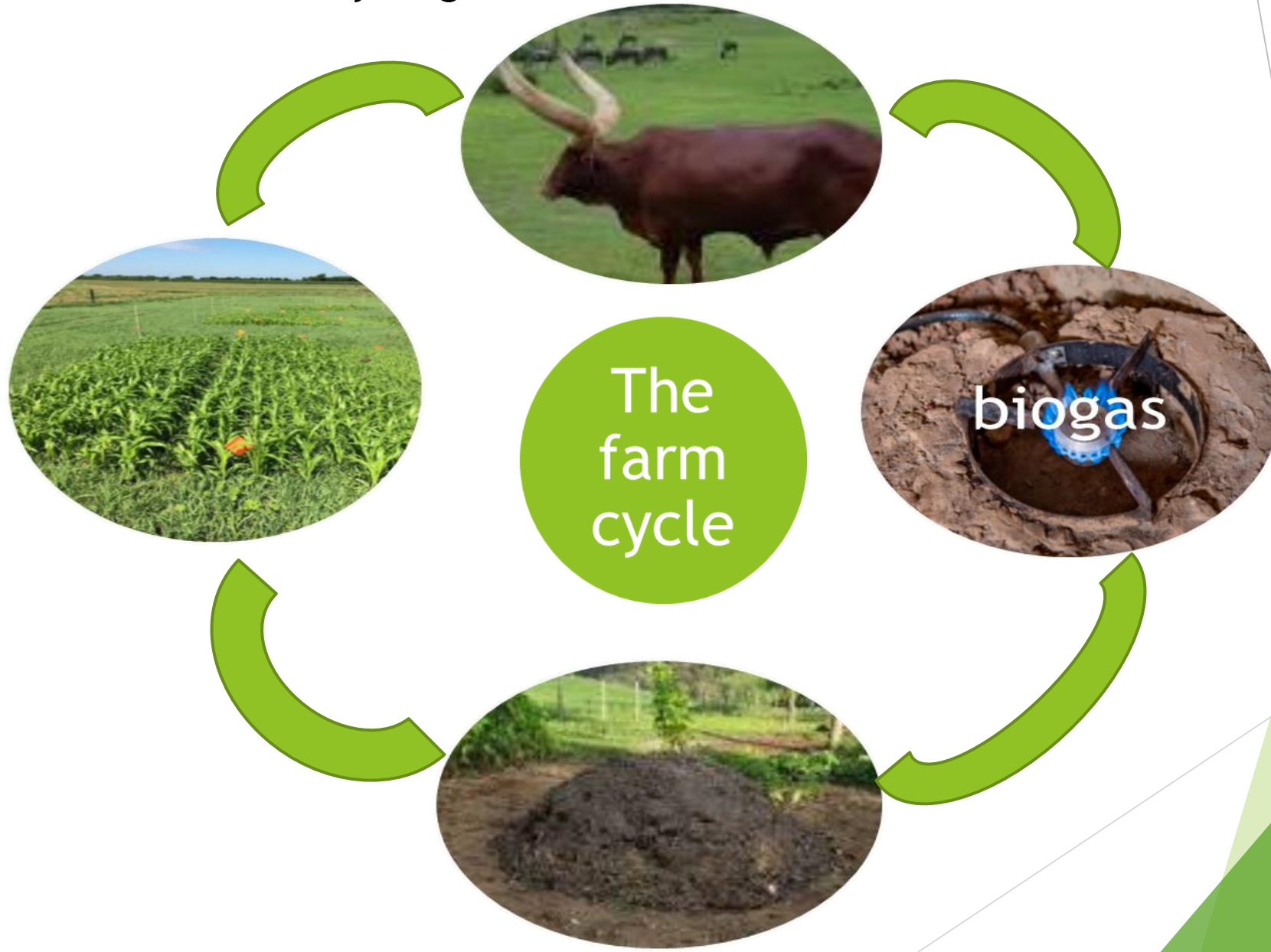
# Some working technologies

- ▶ The system approach on a farm - recycling of materials on farms
- ▶ Agroforestry in Nindye village, Uganda
- ▶ Soil amendments like farmyard manure in Banana plantations in Bushenyi, Uganda
- ▶ Intercropping in Northern Uganda to control pests
- ▶ Seed/ Planting material hygiene to reduce disease spread - Banana bacterial wilt ( caused by *Xanthomonas campestris*)
- ▶ Promotion of acceptable agro-inputs eg The Biochar fertilizers
- ▶ Seed selection and hygiene - Mature well formed and properly stored seed
- ▶ ICT in use - Different Apps

All need constant research and review



## Recycling of materials on the farm





# Thanks!

ANY QUESTIONS?

You can find me at

✉ [mwinetj@gmail.com](mailto:mwinetj@gmail.com)

